



Astronautics Corporation of America

**4" MFCD
2 BOX**

4" MULTIFUNCTION COLOR DISPLAY (MFCD) TWO BOX SYSTEM

This Multifunction Color Display Unit (MFCD) and remote Electronics Unit is an Active Matrix Color Liquid Crystal Display two box system with a useable screen size of 4" x 4". The display units are designed for use in aircraft requiring a display with a minimum depth (5.5"). The Power supply, video interface, scan converter and optional CPU assemblies can be remotely located. The full color (RGB) and monochrome capabilities also allow the MFCD to be utilized as a Multifunction display, including use as a Sensor and Digital Map Display. This 4" MFCD was originally designed and manufactured for the Kfir and OV-10 aircraft.



Astronautics 4" Multifunction Color Display & Electronics Unit features include:

- Two box video only or smart display system
- Active Matrix Color Liquid Crystal Display
- High Brightness, High Contrast
- 20 Multifunction Keys
- Brightness Control
- Night Vision Goggle (NVG) Compatibility
- Selectable Brightness Modes: Day, Night, Auto
- Modular, Rugged Construction
- Designed to Military Standards
- Built-in-Test (BIT)
- Accepts RGB & Monochrome Video
- 256 Shades of Gray
- Contrast Enhancement Filter

Astronautics Corporation of America

4115 N. Teutonia Avenue

Milwaukee, WI 53209 USA

Telephone (414) 447-8200

FAX (414) 447-8231

Website: www.astronautics.com

This sheet is for reference only, not as a basis for specifications..

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4" Multifunction Color Display (MFCD) – Two Box System

OPTICAL SPECIFICATIONS	
Useable Display Area	4.0 x 4.0 Inch
Pixel Resolution	524 x 524
Display Luminance	200 fL
Display Luminance Uniformity	Within 15%
Geometric Distortion	None Visible
Contrast Ratio	3.27 in 10,000 fL (high ambient) 5:1 minimum (low ambient)
Colors	256 Shades of Gray available 16.7 million Colors NVG Compatible
INTERFACE SPECIFICATIONS	
Typical Interfaces Available (Video configuration)	RS-170 Monochrome or RS-170A RGB, RS-422 and Discrete Interface
Video Timing	Per RS-170
Optional I/O Available (Smart Configuration)	ARINC-429, Analog, Synchro
MECHANICAL SPECIFICATIONS	
Two Box System	Display Unit and Electronics Unit
Display Unit	5.0" x 5.0" x 5.5" (Chassis) 5.62" x 5.62" (Bezel)
Electronics Unit	5.0" x 5.0" x 7.5"
Weight	Under 12 Pounds
Rocker Switches or Knobs	Available on Bezel
POWER SPECIFICATIONS	
Power	28 Volt DC Power per Mil-Std-704 50 to 70 Watts Power Consumption (AVG) Display Operation Unaffected by Input Voltage Variations
RELIABILITY/MAINTAINABILITY	
Built-in-Test (BIT)	Automatic Fault Monitoring Identification of Failed CCA via RS-422
Reliability	5,000 hours MTBF (per Mil-Std-217D)
Maintainability	30 Min. MTTR
ENVIRONMENTAL SPECIFICATION	
Temperature	-40°C to +55°C Operating (continuous) +71°C Intermittent
Altitude	0 to 31,000 Feet
Vibration	5g, 50-2000 Hz
Shock	15g, 11 milliseconds
EMI/EMC	Per MIL-STD-461
Humidity	Up to 100% Condensing

FOR MORE INFORMATION ON THIS OR ANY OF OUR OTHER PRODUCTS/SYSTEMS PLEASE CONTACT:
ASTRONAUTICS MARKETING, Phone: (414) 447-8200, Fax: (414) 447-8231, E-mail: busdev@astronautics.com
OR VISIT OUR WEBSITE www.astronautics.com

A World Leader in Navigation and Display Systems since 1959

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